

ABSTRACT OF THE DISCLOSURE

A co-flow planar solid oxide fuel cell stack with an integral, internal manifold and a casing/holder to separately seal the cell. This construction improves sealing and gas flow, and provides for easy manifolding of cell stacks. In addition, the stack construction has the potential for an improved durability and operation with an additional increase in cell efficiency. The co-flow arrangement can be effectively utilized in other electrochemical systems requiring gas-proof separation of gases.